

Crafting California's Flood Future

Moving Forward in Managing the State's Flood Risk

BAFPAA-BAWN Conference
February 20, 2014

Agenda

- Introduction
- Flood Future Report Overview
- Getting to Sustainable Flood Management Solutions
- What's Next



Report Purpose

- Increase understanding of statewide flood problem
- Make recommendations for managing flood risk
- Inform decisions about:
 - Policies
 - Financial investments



Flood Future Report Process



NORTH LAHONTIAN - Alpine County • Lassen County • City of Susanville • Susanville Rancheria • **NORTH COAST** - Blue Lake Rancheria • Caltrans Region • City of Arcata • City of Eureka • Crescent City • Crescent City Harbor • Del Norte Flood Control District • Hoopa Valley Tribe Office of Emergency Services (OES) • Humboldt Bay Municipal Water District • Humboldt County Public Works Department • Mendocino County Water Agency • Siskiyou County • Smith River Rancheria • Sonoma County Water Agency (Beta Test) • Town of McCloud • Trinidad Rancheria • Trinity County Planning Department • Trinity River Restoration Program • Yurok Tribe

SACRAMENTO RIVER - American River Flood Control District • Butte County Public Works • Central Modoc Resource Conservation District • City of Alturas • City of Chico • City of Corning • City of Orland • City of Red Bluff • City of Sacramento • City of West Sacramento • City of Willows • City of Woodland • Colusa Basin Drainage District • Colusa County Public Works • El Dorado County • Feather River Coordinated Resource Management • Garber/Las Flores CSD • Glenn Colusa Irrigation District • Glenn County Public Works • Knights Landing • Ridge Drainage District • Lake County Flood Control and Water Conservation District • M & T Ranch • Modoc County • Nevada County • Placer County Flood Control and Water Conservation District • Plumas County Flood Control and Water Conservation District • Plumas County Public Works • Reclamation District 10 • Sacramento Area Flood Control Agency • Sacramento County Department of Water Resources • Sacramento River West Side Levee District • Shasta County Water Agency • Sierra County • Sutter Butte Flood Control Agency • Sutter County • Tehama County Flood Control and Water Conservation District • Three Rivers Levee Improvement Authority • West Sacramento Flood Control Agency • Yolo County • Yolo County Service Area No. 6 • Yolo County Flood Control and Water Conservation District • Yuba County Public Works • Yuba County Water Agency • **SAN FRANCISCO BAY** • Alameda County - Zone 7 • Alameda County Flood Control and Water Conservation District • Bethel Island Municipal Improvement District • City and County of San Francisco • City of Corte Madera • City of Mill Valley • City of Novato • City of San Rafael • City of Sausalito • City of Tiburon • Contra Costa Flood Control and Water Conservation District • Marin County Flood Control and Water Conservation District • Napa County Flood Control and Water Conservation District • Reclamation District 2088 • San Francisco Department of Public Works • San Francisco Creek Joint Powers Authority • San Mateo County • Santa Clara Valley Water District • Solano County Water Agency • **CENTRAL COAST** • Monterey County Water Resources Agency • San Benito Water District • San Luis Obispo County Flood Control and Water Conservation District • Santa Barbara Flood Control and Water Conservation District • Santa Cruz County Flood Control and Water Conservation District • **SAN JOAQUIN RIVER** • Amador County • Calaveras County • Calaveras County Water District • Lower San Joaquin Levee District • Madras County Flood Control and Water Conservation District • Mariposa County • Merced County Public Works • Merced Irrigation District • San Joaquin Area Flood Control Agency • San Joaquin County Flood Control and Water Conservation District • Stanislaus County Public Works • Stockton-East Water District • Tuolumne County • Turlock Irrigation District • **SOUTH LAHONTIAN** • Inyo County • Mono County • Town of Mammoth Lakes • **TULARE LAKE** • City of Bakersfield • County of Kern • Fresno County Public Works • Fresno Irrigation District • Fresno Metropolitan Flood Control District • Indian Wells Valley Watershed Coordinator/Eastern Kern County Resource Conservation District • Kern County Water Agency • Kern Delta Water District • Kings County • Kings River Conservation District • North Kern Water Storage District • Semitropic Water Storage District • Tulare County Flood Control District • **SOUTH COAST** • City of Chula Vista • City of Coronado • City of El Cajon • City of Imperial Beach • City of Lancaster • City of Los Angeles • City of Oceanside • City of Palmdale • City of San Diego • City of San Diego Storm Water Division • City of Vista • Los Angeles County Department of Public Works • Orange County Public Works • San Bernardino County Department of Public Works • San Diego County Flood Control District • Santa Ana River Flood Protection Agency • Ventura County Public Works • Ventura County Watershed Protection District • **COLORADO RIVER** • Coachella Valley Water District • Imperial County • Imperial Irrigation District • Riverside County Flood Control and Water Conservation District



US Army Corps of Engineers ®



Flood infrastructure does not meet current and future needs

- 800+ projects identified statewide
- \$30-\$50+ billion in improvements and projects
- Will not provide a 100-year level of protection statewide



Today's Flood Management Challenges



Major system deficiencies put public safety, financial stability and economic well being of the state at risk of flooding.



O&M of flood management systems is difficult due to permit challenges and insufficient financing.



Aging infrastructure and growing population put more pressure on flood management systems.



Complex network of over 1,300 agencies are responsible for flood management. These agencies often have conflicting or overlapping responsibilities

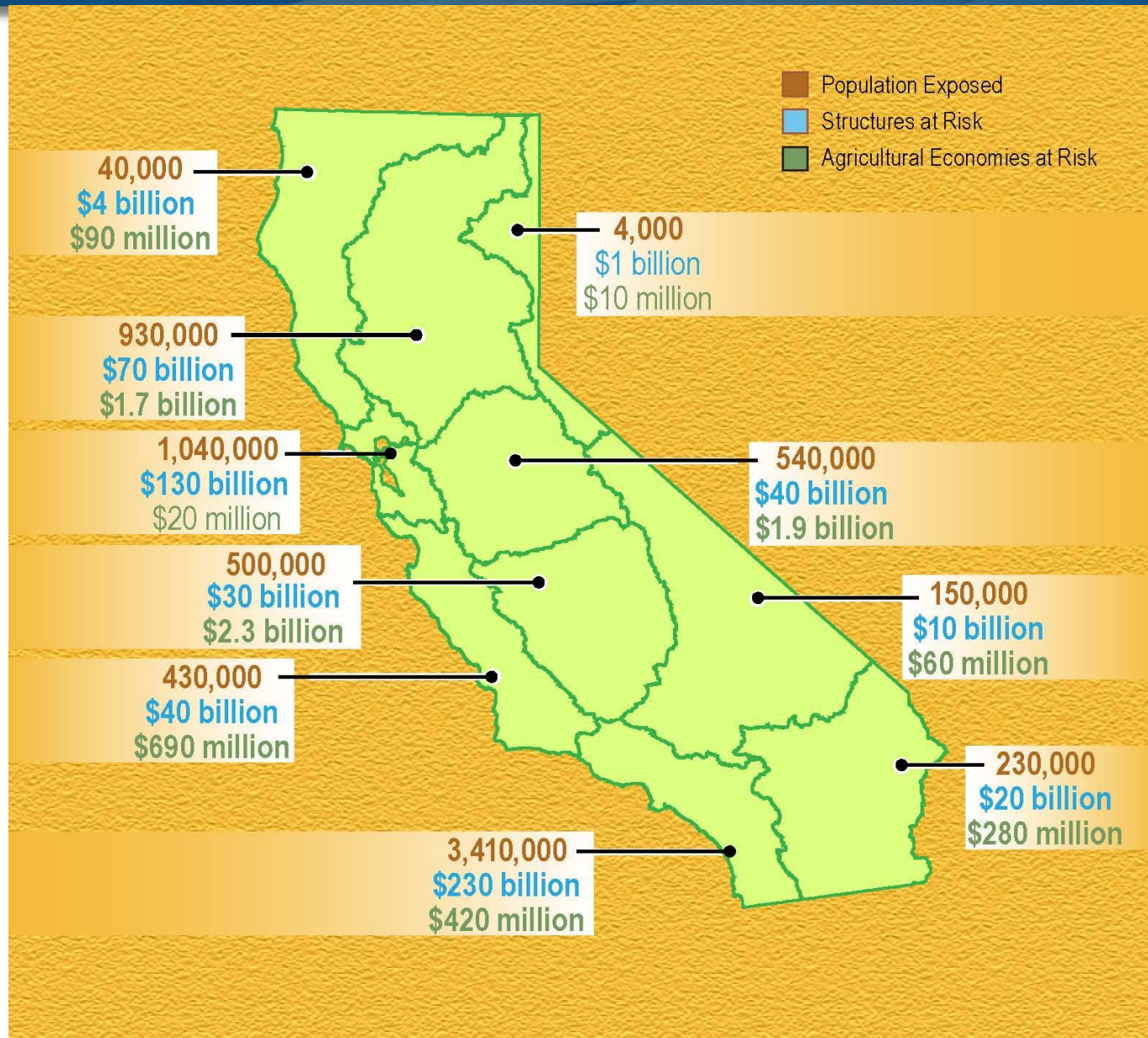


Climate change impacts, including less snowpack, higher flood peaks, and sea level rise, create new uncertainties.



*The
economic
climate has
changed*

Exposure to Flood Hazard Findings



Flood Future Report Recommendations

In April, DWR and USACE released the California's Flood Future Report that articulated 7 recommendations for reducing flood risk throughout California:

1. Conduct regional flood risk assessments to better understand statewide flood risk.
2. Increase public and policymaker awareness about flood risks to facilitate informed decisions.
3. Increase support for flood emergency preparedness, response, and recovery programs to reduce flood impacts.
4. Encourage land-use planning practices that reduce the consequences of flooding.
5. Conduct flood management from regional, systemwide, and statewide perspectives to provide multiple benefits.
6. Increase collaboration among public agencies to improve flood management planning, policies, and investments.
7. Establish sufficient and stable funding mechanisms to reduce flood risk.

What's next

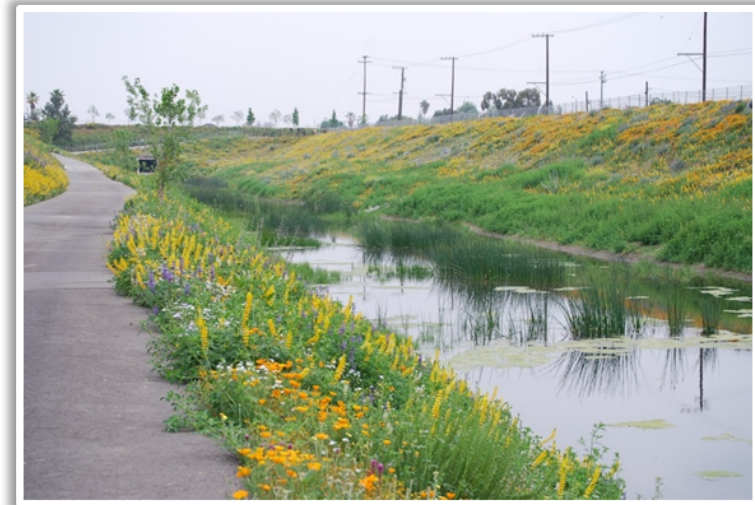
Governor's Water Action Plan

1. Conservation as a California Way of Life
2. Increase Local & Regional Self-Reliance
3. Achieve Co-Equal Goals for the Delta
4. Protect & Restore Important Ecosystems
5. Manage & Prepare for Dry Periods
6. Expand Water Storage Capacity
7. Provide Safe Drinking Water for all Communities
8. Improve Flood Protection
9. Increase Operational & Regulatory Efficiency
10. Identify Sustainable & Integrated Financing Opportunities

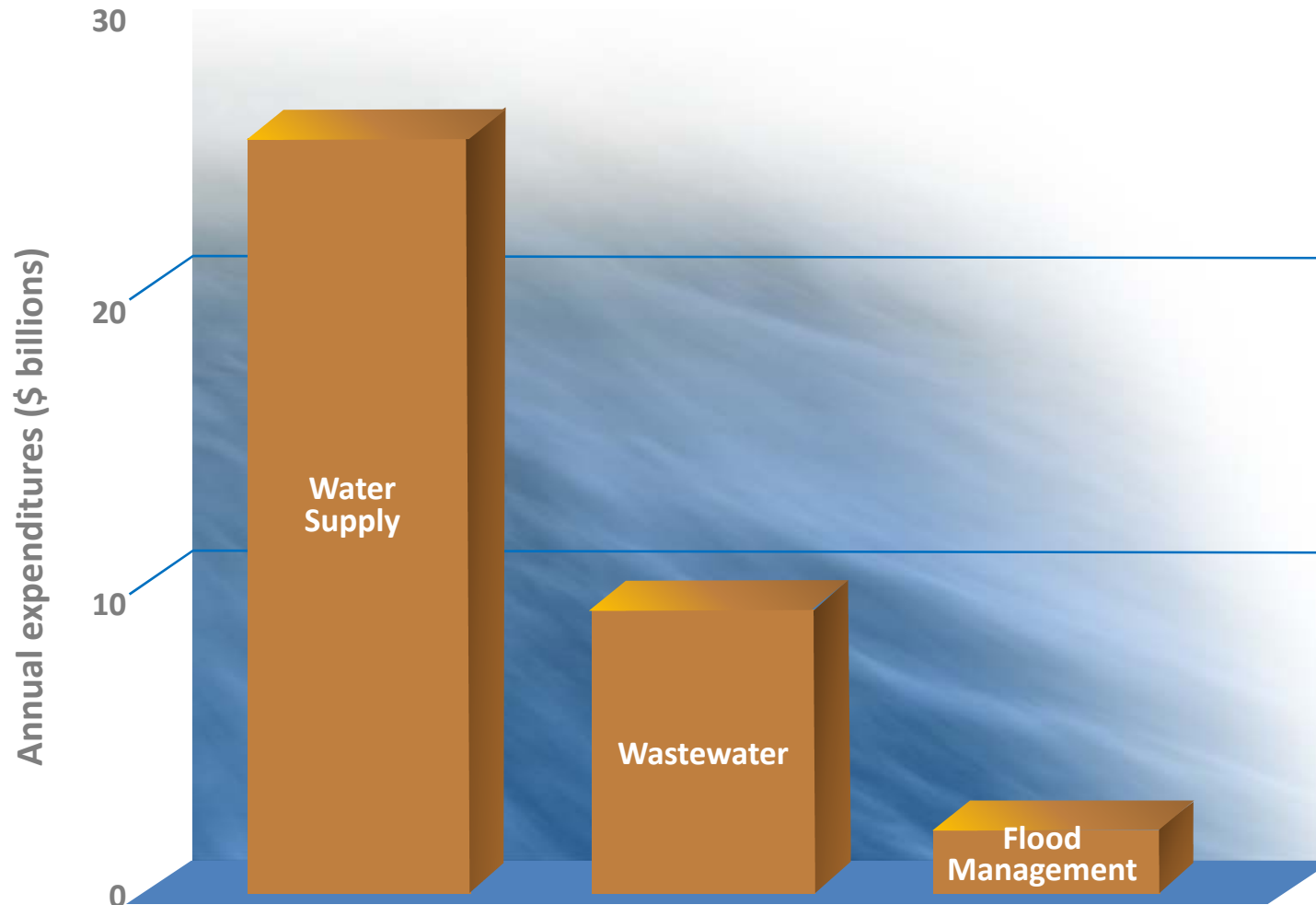


Solutions must use an Integrated Water Management Approach

- A framework for planning and implementation
- Addresses three foundational goals:
 - Improving public safety
 - Fostering environmental stewardship
 - Supporting economic stability
- Intended result: sustainable and resilient water management system
- Solution: strive for multiple purpose projects



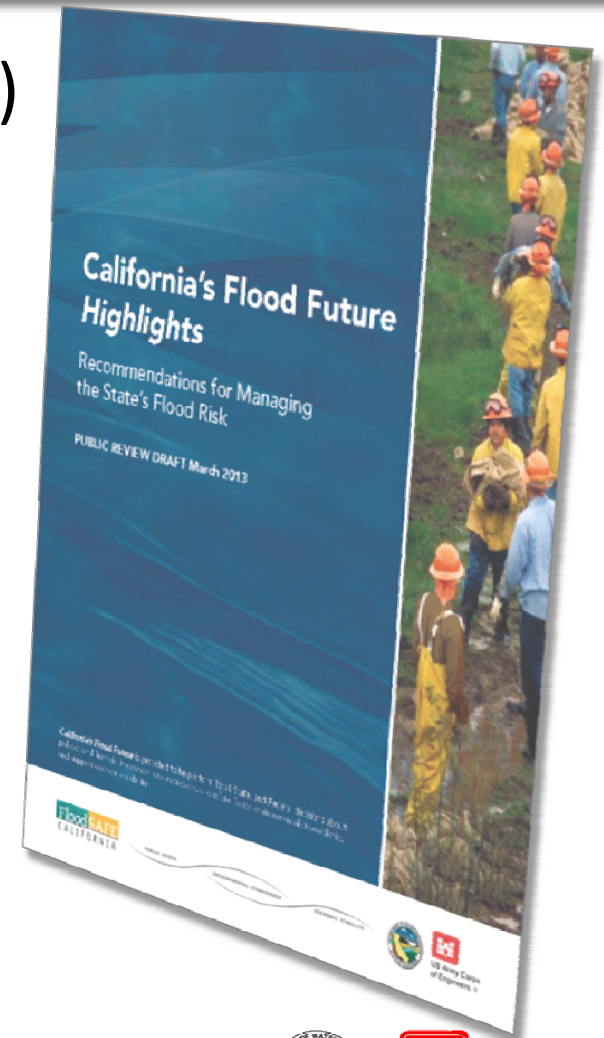
California's flood management expenditures are significantly lower than expenditures for water supply and wastewater treatment



SOURCE: Water and the California Economy – Technical Appendix PPIC, 2012

California's Flood Future Phase 2

- IWM Investment Strategy (Jan 2015)
 - IWM Context
 - Flood Risk
 - Agency Alignment
 - Funding
 - Regional/ System Approaches
 - Financing Mechanisms
- Second Round of Information Gathering in Spring 2014



For more information:

Jason Sidley: jason.sidley@water.ca.gov

Terri Wegener: terri.wegener@water.ca.gov

<http://www.water.ca.gov/SFMP>

